

Clean Air™ Fume Extraction MIG Gun

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Fume Extraction
MIG Welding Guns



Quick Specs	Applications	Processes	Wire Size	Rated Output
	Heavy Equipment Shipbuilding & Repair Fabrication	MIG (GMAW) Flux Cored (FCAW)	0.023" - 1/8" (0.06 mm - 3.2 mm)	300A, 400A 500A, 600A
				Duty Cycle
				100% CO ₂ Gas 60% Mixed Gas

Closely matching the weight, handle size and industrial-grade performance as Bernard BTB Semi-Automatic Air-Cooled MIG Guns, the Bernard Clean Air Fume Extraction MIG Gun is an industrial duty capture solution that helps to provide a cleaner, more compliant work environment.

Now with **even more options** to meet the needs of your welding application, Clean Air Guns are fully configurable with your choice of straight handle or **new curved handle**.



- Suitable for use with solid and flux-cored wire
- Compatible with vacuum systems from most major manufacturers
- Crush- and snag-resistant vacuum hose has threaded connections for easy replacement and eliminates the need for a protective cover
- Suction Control Valve allows balance of suction with shielding gas flow to protect against porosity
- Rubber overmold on straight handle model provides comfort and control



**CONFIGURE
YOUR
MIG GUN
ONLINE**

Build your fume extraction gun to match your application



**IMPROVED FLEXIBILITY
REDUCED
WRIST
FATIGUE**

Reduce wrist and hand fatigue with 360° hose swivel

360° vacuum hose swivel on rear of handle for greater flexibility and balance



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Consumables

(available through configurator)

Centerfire™ Consumable Series

Contact Tips

T-023 0.023" (0.6 mm)	T-062 1/16" (1.6 mm)
T-030 0.030" (0.8 mm)	T-072 0.072" (1.8 mm)
T-035 0.035" (0.9 mm)	T-078 5/64" (2.0 mm)
T-039 0.039" (1.0 mm)	T-094 3/32" (2.4 mm)
T-045 0.045" (1.2 mm)	T-109 7/64" (2.8 mm)
T-052 0.052" (1.4 mm)	T-125 1/8" (3.2 mm)

* For 300 amp only

Nozzles

N-5818C 5/8" Bore, 1/8" Recess, Copper
N-5814C 5/8" Bore, 1/4" Recess, Copper
N-3414C 3/4" Bore, 1/4" Recess, Copper
NS-1218B* 1/2" Bore, 1/8" Recess, Brass
NS-1218C* 1/2" Bore, 1/8" Recess, Copper
NS-5818C* 5/8" Bore, 1/8" Recess, Copper

Diffusers

DS-1* Small, Brass
D-1 Large, Brass

Nozzle Shrouds

1390132* Standard (long)
1390134 Standard (long)
1390142 Short (not configurable; purchase separately)

Quik Tip™ Consumable Series

Contact Tips

T1030 0.030" (0.8 mm)	T1068 0.068" (1.7 mm)
T1035 0.035" (0.9 mm)	T1072 0.072" (1.9 mm)
T1039 0.039" (1.0 mm)	T1564 5/64" (2.0 mm)
T1045 0.045" (1.2 mm)	T1332 3/32" (2.4 mm)
T1052 0.052" (1.4 mm)	T1764 7/64" (2.8 mm)
T1116 1/16" (1.6 mm)	

Nozzles

N1C58Q 5/8" Bore, Plated Copper
N1C34Q 3/4" Bore, Plated Copper

Diffusers

D118Q 1/8" Recess
D114Q 1/4" Recess

Nozzle Shrouds

1390133 Standard (long)
1390142 Short (not configurable; purchase separately)

TOUGH LOCK™ Consumable Series

Contact Tips

403-20-30 0.030" (0.8 mm)	403-20-1.4 0.055" (1.4 mm)
403-20-35 0.035" (0.9 mm)	403-20-116 1/16" (1.6 mm)
403-20-1.0 0.040" (1.0 mm)	403-20-1.8 0.070" (1.8 mm)
403-20-45 0.045" (1.2 mm)	403-20-78 0.078" (2.0 mm)
403-20-364 3/64" (1.2 mm)	403-20-564 5/64" (2.0 mm)
403-20-52 0.052" (1.3 mm)	

Nozzles

401-6-62 5/8" Bore, 1/8" Recess, Copper
401-5-75 3/4" Bore, 1/4" Recess, Copper

Retaining Head

404-44 Brass

Nozzle Shrouds

1390135 Standard (long)
1390142 Short (not configurable; purchase separately)

Liners

(available through configurator)

QUICK LOAD™ Liner

10' (3.05 m) Gun Lengths

415-35-10Q for 0.035" - 0.045" wire
415-116-10Q for 0.045" - 1/16" wire

Liner Retainers (Required for Initial Installation)

415-26 for 0.030" - 5/64" wire
415-24 for 0.078" - 3/32" wire

15' (4.57 m) Gun Lengths

415-23-15Q for 0.023" wire
415-30-15Q for 0.030" wire
415-35-15Q for 0.035" - 0.045" wire
415-564-15Q for 1/16" - 5/64" wire
415-332-15Q for 0.078" - 3/32" wire

25' (7.62 m) Gun Lengths

415-35-25Q for 0.035" - 0.045" wire
415-564-25Q for 1/16" - 5/64" wire
415-332-25Q for 0.078" - 3/32" wire

Universal Conventional Liner

10' (3.05 m) Gun Lengths

L3A-10 for 0.035" - 0.045" wire
L4A-10 for 0.045" - 1/16" wire

15' (4.57 m) Gun Lengths

L1A-15 for 0.023" - 0.030" wire
L2A-15 for 0.030" - 0.035" wire
L3A-15 for 0.035" - 0.045" wire
L4A-15 for 0.045" - 1/16" wire
L6A-15 for 5/64" wire
L7A-15 for 3/32" wire
L8A-15 for 7/64" - 1/8" wire

25' (7.62 m) Gun Lengths

L1A-25 for 0.023" - 0.030" wire
L2A-25 for 0.030" - 0.035" wire
L3A-25 for 0.035" - 0.045" wire
L4A-25 for 0.045" - 1/16" wire
L7A-25 for 3/32" wire
L8A-25 for 7/64" - 1/8" wire

Necks

(available through configurator)

Necks for Straight Handle Model

1040084 45°, Medium	2390029 Vacuum Tube Assy, 45°
1040085 60°, Medium	2390030 Vacuum Tube Assy, 60°

Necks for Curved Handle Model

1040081 30°, Medium	2390026 Vacuum Tube Assy, 30°
1040082 45°, Medium	2390027 Vacuum Tube Assy, 45°
1040083 60°, Medium	2390028 Vacuum Tube Assy, 60°

Power Pins

(available through configurator)

Bernard™

2520076	Strain Relief
2200140	Power Pin (Includes O-Rings)
4924	Wire Assy. (2 Req'd)
4925	Locking Sleeve
4916	Wave Spring
4912	Snap Ring External
4911	Snap Ring Inverted

Euro™

2520080	Strain Relief
5060T	Euro Block Assembly
4816	Adapter Nut
AutoLength™ Pin	
425-820	Power Pin for 0.030" - 0.045"
425-920	Power Pin for 0.052" - 3/32"
425-11	Adapter Nut

Lincoln®

2520077	Strain Relief
214-2-1	Power Pin
414-400-35	Power Pin Insulator
GLM1	Gas Line Assy.
SCL1N	Trigger Control Plug
AutoLength Pin	
214-82	Power Pin for 0.030" - 0.045"
214-92	Power Pin for 0.052" - 3/32"

Miller®

2520077	Strain Relief
2200137	Power Pin (Includes O-Rings)
214-116	Power Pin Tip for 0.023"-1/16"
214-332	Power Pin Tip for 5/64"-3/32"
214-9	Power Pin Tip for 7/64"-1/8"
GN2021	Trigger Control Plug

AutoLength Pin

214-81	Power Pin for 0.030" - 0.045"
214-91	Power Pin for 0.052" - 3/32"
214-9	Power Pin Tip for 7/64" - 1/8"

Tweco® #4

2520077	Strain Relief
214	Power Pin (Includes O-Rings)
414-400-30	Power Pin Insulator
GN2021	Trigger Cable Adaptor, Miller
SCT1N	Trigger Control Lead, Standard
SCL1N	Trigger Control Lead, Lincoln
SCX1N	Trigger Control Plug, NAS Plug

AutoLength Pin

214-80	Power Pin for 0.030" - 0.045"
214-90	Power Pin for 0.052" - 3/32"

Tweco #5

2520077	Strain Relief
214-12	Power Pin (Includes O-Rings)
414-400-29	Power Pin Insulator
GN2021	Trigger Control Plug, Miller
SCT1N	Trigger Control Lead, Standard
SCL1N	Trigger Control Lead, Lincoln
SCX1N	Trigger Control Plug, NAS Plug

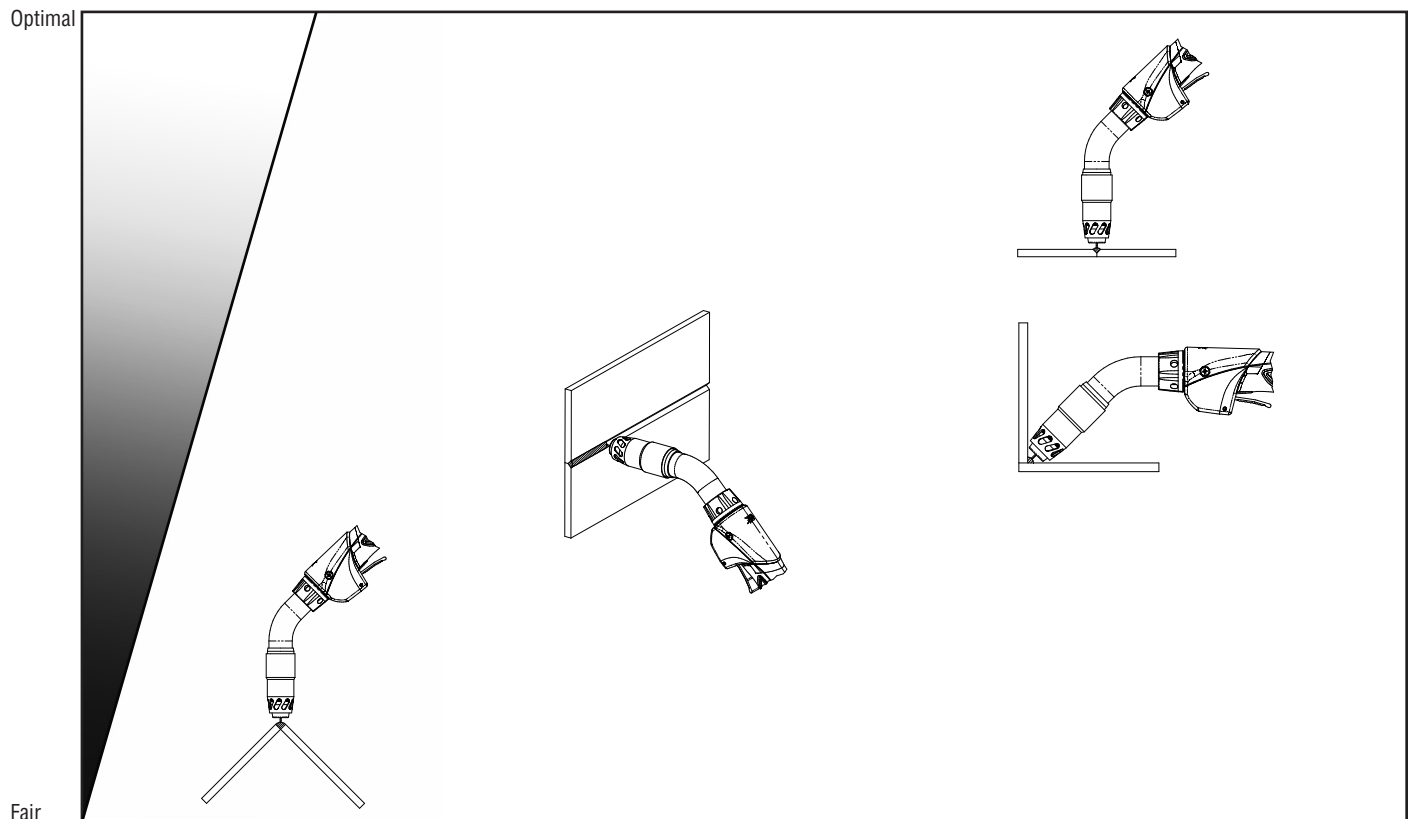
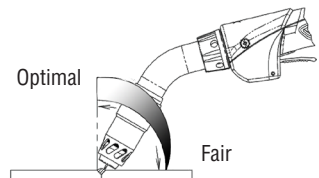
AutoLength Pin

214-81	Power Pin for 0.030" - 0.045"
214-91	Power Pin for 0.052" - 3/32"

Fume Capture Optimization

Follow the diagram below for optimizing the efficiency of fume capture when welding with a fume extraction MIG gun. The joints and positions of welds will affect the efficiency of fume capture.

Optimal capture efficiency is achieved when fume gun is positioned directly above the weld puddle.



Ordering Information

Amperage	Cable Length	Handle & Trigger	Neck	Contact Tip	Wire Size	Power Pin	Liner
CL30	15	N	J	8	E	M	C
CL30 300 amp Max. wire size 5/64"	08 8 ft. (2.44 m)	N Straight Std Trigger	I** Fixed, Med., 30°	3 TOUGH LOCK™ Heavy Duty	A^ 0.023" (.6 mm)	B Bernard™	C Universal Conventional
CL40 400 amp Max. wire size 5/64"	10 10 ft. (3.05 m)	T* Curved Std Trigger	J Fixed, Med., 45°	5 Quik Tip™	B 0.030" (.8 mm)	E Euro	Q QUICK LOAD™ Liner^^
	12 12 ft. (3.66 m)		K Fixed, Med., 60°	8 Centerfire™	C 0.035" (.9 mm)	L Lincoln®	L QUICK LOAD Liner AutoLength™ System^^^
CL50 500 amp Max. wire size 3/32"	15 15 ft. (4.57 m)				D 0.039" (1.0 mm)	M Miller®	
CL60 600 amp Max. wire size 1/8"	20 20 ft. (6.16 m)				E 0.045" (1.2 mm)	S Tweco® #4 (Lincoln Lead)	
	25 25 ft. (7.63 m)				H 0.052" (1.4 mm)	T Tweco #4 (Std. Lead)	
					I 1/16" (1.6 mm)	U Tweco #4 (NAS Plug)	
					K 5/64" (2.0 mm)	W Tweco #5 (Std. Lead)	
					L 3/32" (2.4 mm)		
					M 7/64" (2.8 mm)		
					N 1/8" (3.2 mm)		
					Aluminum		
					Q 0.035" (.9 mm)		
					R 3/64" (1.19 mm)		
					S 1/16" (1.6 mm)		

Brand and product names shown above are trademarks of their respective owners.

* Available with 300 amp and 400 amp models only.

** Available with curved handle model only.

^ Available with Centerfire Contact Tip option only.

^^ Compatible with wire sizes between 0.023" and 3/32" and cable lengths up to 15' (4.57 m); Not compatible with wire size options for aluminum.

^^^ Compatible with wire sizes 0.030" and 3/32" and cable lengths up to 15' (4.57 m); Not compatible with wire size options for aluminum or Bernard power pin option.

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